## **BUSITEMA UNIVERSITY**

# FACULTY OF NATURAL RESOURCES AND ENVIRONMENTAL SCIENCES

# EVALUATION OF EFFECTIVENESS OF SOLID WASTE MANAGEMENT PRACTICES IN A SOCIALLY DIVERSE URBAN COMMUNITY.

## CASE STUDY OF LIRA MUNICIPALITY, LIRA DISTRICT

BY

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A RESEARCH REPORT SUBMITTED TO THE FACULTY OF NATURAL RESOURCES AND ENVIRONMENTAL SCIENCES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A DEGREE IN NATURAL RESOURCE ECONOMICS OF BUSITEMA UNIVERSITY

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## DECLARATION

I Opon Isaac, declare that this research report submitted to the Faculty of Natural Resource and Environmental Science is my original work and to the best of my knowledge, it has not been submitted by any other person to any institution for any academic qualification.

Date 24/6/2015 **OPON ISAAC** BU/UG/2012/131

## APPROVAL

This serves to certify that this research titled problems resulting from municipal solid waste management by **OPON ISAAC** has been submitted with my approval as a University supervisor

of Busitema University.

Signature ....

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## DEDICATION

I would like to dedicate this work to my beloved parents Miss Secondina Ajwang and Mr. John Howard Odongo Okello and my sister Acan Anna, my brothers Okwir Morris, Opio Samuel, OolaStephen, Okello Ivan,Odil Emmanuel and my boy Genesis Odongo for all their support and prayers. May God bless you all.

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# LIST OF ACCRONYMS

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EPA:	Environmental Protection Act
KCC:	Kampala City Council
LCs:	Local Councils
LMC:	Lira Municipal Council
MSW:	Municipal Solid Waste
MSWCP:	Municipal Solid Waste Composting Plant National
MSWM:	Municipal Solid Waste Management
NËMA:	Environmental Management Authority
NGOs	Non-Governmental Organizations
OECD:	Organization for Economic Development and Cooperation
SPSS:	Statistical Package for Social Scientists
UBOS:	Uganda Bureau of Statistics
ÚN:	United Nation
UNEP:	United Nation Environment Programs
US:	United State
USEPA:	United States Environmental Protection Agency
USPS:	Urban Sector Programme Support
YWCA:	Young Women's Christian Association
EIMCO:	Enviro- Impact and Management Consults

## ABSTRACT

Solid waste Management is both an urban and rural problem. Every individual generate solid waste and hence contribute to this problem. The study was conducted in Lira Municipality, Lira district located in Lango sub-region in Northern Uganda. The results of these findings will also be used in workshops and seminars on solid waste management discussion. The study will also be important to policy makers to improve solid waste management in towns and cities.

The main objective of this study was to find out problems resulting from indiscriminate disposal of solid waste. Other objectives were to find out reasons for indiscriminate disposal of solid waste among different sectors. Existing methods for solid waste management practiced by different social classes of residents in Lira municipality. Reasons for delayed removal of solid waste from designated collection points. Measures among different stakeholders for improving solid waste management within the municipality.

.Data was collected using questionnaires, using available information and observations. After all the data is collected it was entered into the computer for analysis using the statistical package for social scientist (SPSS).The data was be presented using tables, percentages and charts to describe the residents' responses about indiscriminate disposal of solid waste, measures among different stakeholders for improving solid waste management and Existing methods for solid waste management practiced by different classes of residents.

The findings revealed that the major cause of indiscriminate disposal of solid waste was inadequate disposal facilities. The majority of the solid wastes are removed from the designated collection by the municipality once a week

The study makes a number of conclusions in regards to limited fund are allocated by the municipality to purchase and construct solid waste facilities making people addicted to the habit of disposing of solid waste in public places, waterways and any other open space. Solid waste collection and removal from designated collection points in Lira municipal are the responsibility of the municipality. Solid waste especially within the collection points and waste pickers collect solid waste from undesignated collection points.

## CHAPTER ONE

#### 1.0. INTRODUCTION

#### 1.1. Background of the study.

#### 1.1.1. Definition of solid waste

According to Gaurlay (1992) humanity has always produced waste that characterizes contemporary society, dating from industrial revolution. Waste is more easily recognized than defined. Something can become a waste when it is no longer useful to the owner or it is used and fails to fulfill its purpose (Gaurlay, 1992). According to Miller (1988) solid waste is any useless, unwanted, or discarded material that is not liquid or gas. A great mixture of substances including the dust, metal, glass, paper and cardboard, textiles, putrescible vegetable materials and plastic characterize solid waste (Simmens, 1981). Synonymous to solid waste are terms such as "garbage", "trash", "refuse" and "rubbish".

According to United Nations Populations Division (1997) urban dwellers generally consume more resources than rural dwellers, and so generate large quantities of solid waste and sewage. Solid waste disposal is a major problem in urban African centres, where more than half the population now lives in urban areas. Northern Africa is the most urbanized, while in Southern and in Western and Central Africa, urbanization levels are still lower (about 33-37 percent). While East Africa is the least urbanized sub-region, with 23 percent (United Nations Populations Division, 1997).

Although human or animal excreta often end up in the solid waste stream, generally the term solid waste does not include such solid waste materials. Human activities create solid waste, and the way these wastes are handled, stored, collected and disposed off can pose risks to the environment and to public health. Wastes disposed off in open dumps are major sources of surface and ground water contamination, as well as air pollution (Nyakaana, 1995;Brunn and Williams, 1987; Goudie, 1986). In urban areas, especially in the rapid urbanizing cities of the developing world, problems and issues of Municipal Solid Waste Management (MSWM) are of immediate importance.

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